

RAPID CYCLE CHAMBER HAVING A TOP VENT WITH NITROGEN PURGE

ABSTRACT OF THE DISCLOSURE

A chamber for transitioning a semiconductor substrate between modules operating at different pressures is provided. The chamber includes a base defining an outlet. The outlet permits removal of an atmosphere within the chamber to create a vacuum. A substrate support for supporting a semiconductor substrate within the chamber is included. A chamber top having an inlet is included. The inlet is configured to allow for the introduction of a gas into the chamber to displace moisture in a region defined above the substrate support. Sidewalls extending from the base to the chamber top are included. The sidewalls include access ports for entry and exit of a semiconductor substrate from the chamber. A method for conditioning an environment above a region of a semiconductor substrate within a pressure varying interface is also provided.